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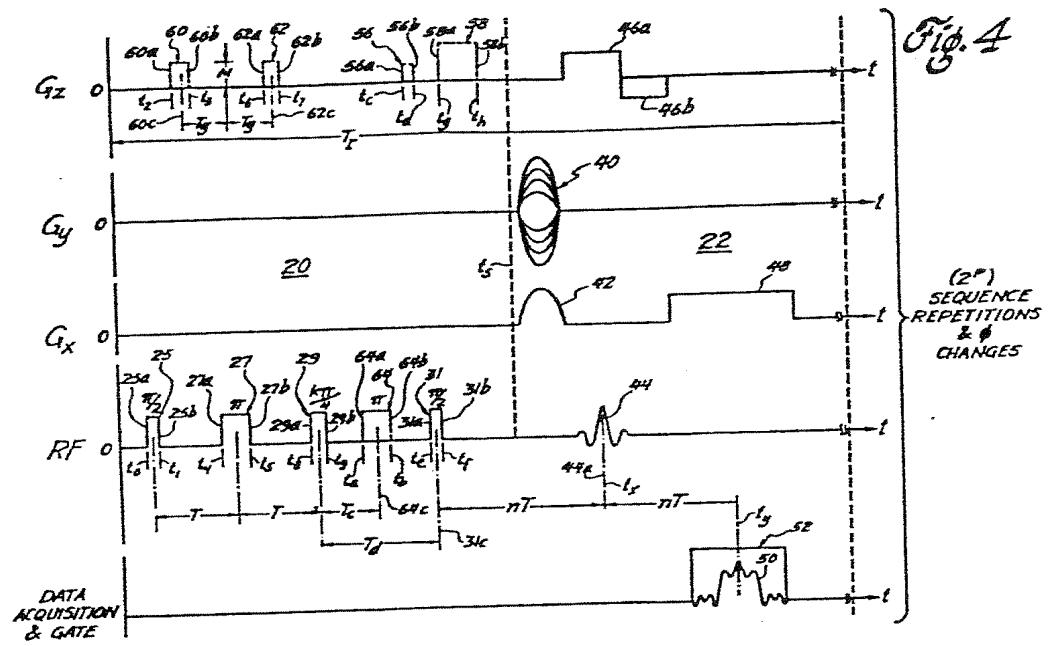
(84) Designated Contracting States:  
CH DE FR GB IT LI NL SE

(54) Methods of, and pulse sequences for, the suppression of undesired resonances by generation of quantum coherence in NMR imaging and spectroscopy.

(57) Methods for generating non-single-quantum coherences and suppress single-quantum coherences, such as from water molecules, use a pulse subsequence (20), prior to a normal excitation/response signal sequence (22) in Nuclear Magnetic Resonance imaging and/or spectroscopy, to constructively sum image signals exhibiting multiple quantum behavior, while subtracting pairs of response signals originating in non-coupled-spin systems. A variety of multistep phase-cycling programs for achieving zero-quantum and multiple-quantum filtering are disclosed.

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DOCUMENTS CONSIDERED TO BE RELEVANT			CLASSIFICATION OF THE APPLICATION (Int. Cl 4)
Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim	
A	US - A - 4 238 735 (MULLER) * Totality; especially abstract; fig. 2A-2C * --	1, 2	G 01 N 24/08
D, A	JOURNAL OF MAGNETIC RESONANCE, vol. 55, no. 2, November 1983, New York P.J.HORE "Solvent Suppression in Fourier Transform Nuclear Magnetic Resonance" pages 283-300 * Totality * --	1	
A	CH - A5 - 641 565 (SPECTROSPIN AG) * Abstract * -----	1	
			TECHNICAL FIELDS SEARCHED (Int. Cl 4)
			G 01 N 24/00
The present search report has been drawn up for all claims			
Place of search	Date of completion of the search	Examiner	
VIENNA	18-11-1987	BURGHARDT	
CATEGORY OF CITED DOCUMENTS			
X : particularly relevant if taken alone	T : theory or principle underlying the invention		
Y : particularly relevant if combined with another document of the same category	E : earlier patent document, but published on, or after the filing date		
A : technological background	D : document cited in the application		
O : non-written disclosure	L : document cited for other reasons		
P : intermediate document	& : member of the same patent family, corresponding document		

